

basis for rejection does not apply to any of the new claims. New claim 74 encompasses all of the subject matter of cancelled claim 19; new claim 76 encompasses all of the subject matter of cancelled claim 21; and new claim 83 encompasses all of the subject matter of cancelled claim 54. Although new claims 74, 76, and 83 do not recite “the entire HCMV pp28”, that subject matter is still encompassed by the claims.

The specification fully supports the recitation of “comprising the entire HCMV pp28” in claims 73, 75, and 82, as well as the recitation of “comprising an antigenic portion of HCMV pp28” in claims 74, 76, and 83. Example 1 of the specification describes that when a 500 bp KpnI to SmaI HCMV fragment was inserted into an expression vector, the vector encoded a fusion protein that contained “a pp28 portion (about 18 kD).” (Specification at 5, line 18.) Consequently, the skilled artisan would understand that the KpnI to SmaI fragment did not encode the entire pp28, but encoded 18 kD out of a total size of 28 kD. The specification further discloses the correct reading frame for the pp28 protein within the KpnI to SmaI fragment in Example 2. (*Id.* at 7.) Based on this information, the skilled artisan would understand that the remaining sequences of the entire HCMV pp28 could be found adjacent to (upstream and downstream of) the HCMV KpnI to SmaI fragment.

Figure 1 of the specification further shows the location of pp28 within the HCMV genome. (*Id.* at Figure 1.) The partial cDNA clone of HCMV pp28, BUML-1, localizes

to a 1.0 kb SmaI to SmaI fragment. (*Id.*) Moreover, Figure 1 localizes the 1.3 kb RNA encoding HCMV pp28 to a region of the HCMV genome extending just upstream to just downstream of the SmaI to SmaI fragment and included entirely within the 2.5 kb HindIII to PvuII fragment. (*Id.*) Based on the entirety of the information provided by applicants, including the total size of pp28, the size of the portion of the pp28 fusion protein produced by the KpnI to SmaI fragment, the location of the cDNA clone, and the location of the RNA encoding pp28, the skilled artisan would understand that HCMV pp28 was encoded by an HCMV DNA extending from just upstream of the HCMV KpnI site to just downstream of the SmaI site. Accordingly, skilled artisan would understand that applicants had localized the entire HCMV pp28 to this region, and that applicants had possession of sequences encoding the entire HCMV pp28 protein.

Applicants submit herewith Meyer et al. (Exhibit 1) as evidence that the location of pp28 within the HCMV genome is, in fact, encoded by an HCMV DNA extending from just upstream of the HCMV KpnI site to just downstream of the SmaI site. Meyer et al. indicates that pp28 is encoded by a sequence extending from 24 bp upstream of the KpnI site to 30 bp downstream of the SmaI site. Accordingly, there can be no doubt that applicants' localization of HCMV pp28 was accurate.

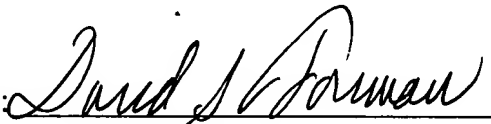
Furthermore, applicants' original claims recited vectors and cells comprising "the gene which codes for pp28 or parts of this gene." Applicants' teachings are sufficient to

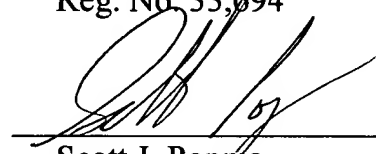
show possession of the claimed expression vectors and cells. Accordingly, applicants respectfully request withdrawal of the rejection.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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APPENDIX TO AMENDMENT OF MARCH 18, 2003

IN THE CLAIMS:

41. (Amended) The prokaryotic expression vector of claim [19] 74, wherein said expression vector is a bacteriophage vector.

42. (Amended) The prokaryotic expression vector of claim [19] 74, wherein said expression vector is a lambda phage vector.

43. (Amended) The prokaryotic expression vector of claim [19] 74, wherein said prokaryotic expression vector encodes a fusion protein.

45. (Twice Amended) The prokaryotic expression vector of claim [19] 74, wherein said prokaryotic expression vector comprises a 1.0 kB SmaI/SmaI fragment of HCMV.

46. (Amended) The prokaryotic expression vector of claim [19] 74, wherein said prokaryotic expression vector comprises a 0.5 kB KpnI/SmaI fragment of HCMV.

47. (Amended) The prokaryotic expression vector of claim [19] 74, wherein said prokaryotic expression vector comprises a 0.5 kB SmaI/KpnI fragment of HCMV.

48. (Amended) The prokaryotic cell of claim [21] 76, wherein said prokaryotic cell is a bacterium.

49. (Amended) The prokaryotic cell of claim [21] 76, wherein said prokaryotic cell is *E. Coli*.

50. (Twice Amended) The prokaryotic cell of claim [21] 76, wherein said DNA molecule comprises a 1.0 kB SmaI/SmaI fragment of HCMV.

51. (Amended) The prokaryotic cell of claim [21] 76, wherein said DNA molecule comprises a 0.5 kB KpnI/SmaI fragment of HCMV.

52. (Amended) The prokaryotic cell of claim [21] 76, wherein said DNA molecule comprises a 0.5 kB SmaI/KpnI fragment of HCMV.

55. (Amended) The eukaryotic cell of claim [54] 83, wherein said eukaryotic cell is a fibroblast.

56. (Amended) The eukaryotic cell of claim [55] 83, wherein said fibroblast is a human fibroblast.

57. (Amended) The eukaryotic cell of claim [54] 83, wherein said eukaryotic cell is a human cell.

58. (Twice Amended) The eukaryotic cell of claim [54] 83, wherein said DNA molecule comprises a 1.0 kB SmaI/SmaI fragment of HCMV.

59. (Amended) The eukaryotic cell of claim [54] 83, wherein said DNA molecule comprises a 0.5 kB KpnI/SmaI fragment of HCMV.

60. (Amended) The eukaryotic cell of claim [54] 83, wherein said DNA molecule comprises a 0.5 kB SmaI/KpnI fragment of HCMV.

64. (Amended) The prokaryotic expression vector of claim [19] 74, wherein said prokaryotic expression vector comprises a 1.0 kB SmaI/SmaI fragment of HCMV strain Ad 169.

65. (Amended) The prokaryotic expression vector of claim [19] 74, wherein said prokaryotic expression vector comprises a 0.5 kB KpnI/SmaI fragment of HCMV strain Ad 169.

66. (Amended) The prokaryotic expression vector of claim [19] 74, wherein said prokaryotic expression vector comprises a 0.5 kB SmaI/KpnI fragment of HCMV strain Ad 169.

67. (Amended) The prokaryotic cell of claim [21] 76, wherein said DNA molecule comprises a 1.0 kB SmaI/SmaI fragment of HCMV strain Ad 169.

68. (Amended) The prokaryotic cell of claim [21] 76, wherein said DNA molecule comprises a 0.5 kB KpnI/SmaI fragment of HCMV strain Ad 169.

69. (Amended) The prokaryotic cell of claim [21] 76, wherein said DNA molecule comprises a 0.5 kB SmaI/KpnI fragment of HCMV strain Ad 169.

70. (Amended) The eukaryotic cell of claim [54] 83, wherein said DNA molecule comprises a 1.0 kB SmaI/SmaI fragment of HCMV strain Ad 169.

71. (Amended) The eukaryotic cell of claim [54] 83, wherein said DNA molecule comprises a 0.5 kB KpnI/SmaI fragment of HCMV strain Ad 169.

72. (Amended) The eukaryotic cell of claim [54] 83, wherein said DNA molecule comprises a 0.5 kB SmaI/KpnI fragment of HCMV strain Ad 169.